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LECTURES.

TWO LECTURES ON THE MODERN ART OF PROMOTING THE REPAIR OF TISSUE.[1]

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FIRST LECTURE, 1876.

THE new art of promoting repair of the animal tissues combines the so-called antiseptic method with other expedients hardly less important. Its object is to facilitate cell growth and cell transformation. This it accomplishes in a remarkable manner.

Antiseptics arrest decomposition in all stages, — not only advanced decomposition, characterized by odor, but also the beginning of the process, which dates from the introduction of germs through the atmosphere. With germs we have putrefaction or fermentation; without them we have none. These germs float, in small proportion, among the particles which are visible in a sunbeam. The object of the antiseptic method is either to destroy their vitality, or, by filtering the air, to exclude them. The process gets to be a matter of routine, and of a dozen methods of accomplishing it there will always be, as at the present time, a best and latest one. But whatever be the means employed, no half measures suffice.

I doubt whether any surgeon approaches for the first time certain machinery of the antiseptic method without distaste. It flatters neither the vanity nor the scientific sense to exorcise an invisible enemy with something very like a censer. But after two years' experience, I have accepted the new doctrine with most of its details. I have learned that, whatever be his method, the duty of the surgeon is to act as if all the particles made visible by a sunbeam were noxious, falling like snow-flakes during every operation and every dressing, seeking to insinuate themselves into the wound at every crevice. His aim should be to destroy the actual intruders, and effectually to exclude their thronging companions.

While partial measures facilitate repair, and a pure air promotes it, there can be no question that the average result is signally improved by a thorough "antiseptic" dressing, and that the worst cases often thrive under it in a way hitherto wholly unexampled.

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[1] Delivered before the medical class of Harvard University.

DISCOVERY.

Let us first give the credit of the new art to Mr. Lister, and then look briefly at the theory and its surroundings.

Like other germs, the germ of knowledge, in the form of suspicion and hypothesis, is always floating in the air. He who first assembles imperfect and detached ideas, and by their means establishes a proposition beyond a doubt, and then brings his demonstration home to the conviction of the world, — a measure which is all-important to his claim, — has fulfilled every condition essential not only to the private and secret discoverer, who has no claim to the world's gratitude, but also to the public discoverer, who lays the world under obligation, and is on that account recognized by it.

Lister is entitled to the merit of inventing a new and invaluable system of promoting repair. Antiseptics and drainage had indeed long been known, but upon these expedients Lister erected an entire art, developed it, and taught it with untiring perseverance till it was recognized. To Lister's hypothesis belongs the additional merit of being no accident. It had a distinctly scientific source in the experiments of Pasteur.

THEORY.

Pasteur, as many of you know, showed that decomposition occurs only where certain microscopic organisms are present. He further showed that the germs of these organisms always exist in the atmosphere, and that the organisms reproduce themselves. If you exclude them decomposition does not take place, and, so far as we know, cannot do so.

Tyndall repeated Pasteur's experiments. His glass box is familiar. Painted inside with some adhesive substance, it was allowed to stand until the particles in the contained air had settled or adhered. When a ray of light, passed through the box, showed that there were no particles to be illuminated, decomposition no longer occurred. Any animal or vegetable fluid sterilized by heat might remain in it for months unchanged. On admitting the atmosphere, with its dust glistening in the sunbeam, or the electric ray, organic fluids became at once putrid.

There is another familiar and more curious experiment. Let a fluid of this sort be placed in a test tube, the mouth of which is attenuated for a few inches, and bent to a zigzag form, but left open. The air drawn in and out, as the temperature changes, seems to lodge and leave its germs at the angles. At any rate, in such a tube boiled urine will not putrefy for years. Break the little tube so as to admit air freely with its particles, and putrefaction occurs at once. This experiment is the more curious because it would seem probable that the germs cannot be all excluded from the tube, but that a few must pass in, when the cavity inspires air at every decrease of temperature, — just as dust insinuates itself under the crystal of a watch, or beneath a picture frame, streaking the engraving.

Whether we filter the air, and so strain off the particles, or annul their influence by antiseptics, or by extremes of heat and cold, the result is the same. Canned provisions are first boiled, and then hermetically sealed. The cook boils the syrup or ketchup, or roasts the meat, to keep it from spoiling.

Refrigerators are necessities of civilized life; and the modern brewer consumes many thousand tons of ice to cool his beer to a point which, while it allows the beer fermentation to go on, will prevent an acetic or other unwished-for change, and so keep the beer from spoiling.

The change here alluded to is a form of fermentation. All fermentation is distinguished by the fact that the height of the process is characterized by the greatest abundance of little organisms. When the fermentation is over they die and fall to the bottom, and the liquid becomes clear. This happens during putrefaction, and is considered evidence that the latter may be a form of fermentation, dependent on the presence of a bacterium developed from a germ. Just as the fermentation of beer, for example, depends upon the presence of yeast, so putrefaction depends upon another ferment, of which particles floating in the air are the seeds.

But even if the germ should prove to be not the seed of a ferment, but only a coincidence which science has been unable to separate from some other and essential mechanism of putrefaction, it is nevertheless its infallible measure and indication, and this is all the surgeon needs to know. He may be satisfied with the practical deduction that to prevent decomposition in a wound he must prevent the entrance of the active particles of the air.

GERM THEORY OF DISEASE.

Let us here dwell a little on the germ theory of disease, which is sometimes discussed in this connection, as a branch of the same subject. We have seen that putrefaction is doubtless one form of fermentation, just as the fermentation of wine, beer, and vinegar is another form. Now, because certain diseases have, like fermenting fluids, a period of incubation, of activity, culmination, and decline, and because they exactly reproduce themselves, or "breed true," it has been argued that they are also dependent upon some form of germ or ferment. And because in a very few diseases, notably in splenic fever, Davaine and Pasteur have detected not only bacteria, but distinctive ones, essential to the disease, it has been assumed that all epidemics travel by the floating germs of their own bacteria.

Further than this, it has been maintained that if common decomposition and epidemics are alike due to germs, then localities which are known to harbor and breed the germs of the one, will be likely to harbor and breed those of the other; for example, that, in a case of diphtheria or typhoid fever, the drains or water-closets where matter is resolving itself into its elements are most likely to harbor and breed the germs of these diseases with others.

A dung-heap near a well was supposed to explain a typhoid epidemic among those who drank the water. More remarkably still, an alleged typhoid epidemic among the customers of a certain milkman was said to be caused by the infection of his milk-cans, because they were washed in a river which, a mile or two above, flowed past a small quantity of human excrement from a typhoid patient on the banks. In considering such suppositions, we must not forget the array of negative facts that render them doubtful.

If by "material" agencies of disease we mean that its proximate cause occupies space, and moves in it, we may be correct. The bulk of one spermatozoön may suffice to contain billions of specific atoms. But it is quite another question whether an eye or lens will ever be able to identify in the spermatozoön either the hereditary germ or the predisposing soil of gout, because it has discovered the bacterium of splenic fever, or the spore of pityriasis versicolor, or the itch insect, or the flea, or the African lion which follows an Arab village, or any other organism which gets its living directly or indirectly off the human race, singly or collectively, and is to that extent parasitic and noxious. We cannot too strongly remember that something very like decomposition is going on everywhere inside and outside the human body, and that it does not usually produce any insidious effect.

It is proper to enjoin cleanliness and the removal of obviously predisposing causes, even without deciding whether the germs of diphtheria, or of scarlatina, or of yellow fever inhabit a drain with the bacteria of putrefaction, or whether they develop in preference in the all-surrounding air, and thence devastate a town, or cross a continent, under conditions of which we know little.

EXPERIMENTS.

I am quite willing to avow, after two years spent in devising new antiseptic details, most of which you have seen in the surgical wards, that I have at last come back to something very like Lister's method as more convenient and efficient.

As no doubt some of you will be likely to try for yourselves experiments in this direction, and faulty ones, perhaps, I cannot do better than to briefly refer to some of my own, with the reasons for them.

Disinfectants act in two ways. For example, chloride of zinc and salicylic acid act only by contact, and give out no disinfectant atmosphere. On the other hand, burning sulphur, chloride of lime, solutions of chlorinated soda and carbolic acid, have a great advantage in generating a gas or vapor which disinfects the surrounding atmosphere.

Some of us remember that during the war traveling agents professed to preserve corpses. A person of this description came to our dissecting-room, and by merely painting the surface and injecting the orifices of a dead body with a colorless liquid preserved the muscles from putrefaction for a period of six weeks in the months of July and August. I soon found this "paint" to be carbolic acid. Its extraordinary preservative properties, which are easily demonstrated upon meat, make it on the whole the best antiseptic for surgical use.

Mr. Lister's first article was published in the spring of 1867. In the autumn of that year, Dr. Beach, then my house-surgeon, dressed a couple of amputations in the way described by Lister. They did well. But other dressings did well also, so that the new method was abandoned.

Two years ago (1875), however, the evidence had so accumulated that I set fairly to work to try the experiment again, beginning with what seemed the most reasonable. I thoroughly washed ulcers and wounds in a carbolic solution, covered them with a cloth similarly wet, and then with rubber cloth to hinder evaporation. They did better than before.

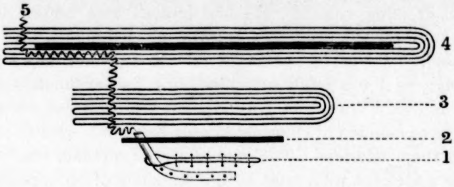
My next step was to introduce the distinctive principle of non-disturbance.

The late Dr. James Jackson remarked to me, when a student, that he was satisfied that surgeons were mistaken in adopting the then prevailing notions in regard to dressing wounds. He had himself seen better results when a wound was undisturbed, even at a sacrifice of cleanliness, than when it was daily "dressed." It was in pursuance of this hint that, more than twenty-five years ago, as I was lately reminded by a former house-surgeon, unless there were untoward symptoms, I usually left the bandages upon an amputation, so long as a solution of chlorinated soda frequently applied to the outside would keep them odorless. The rule of *non-disturbance* was here enforced. Consider for a moment what must be the tendency of an opposite treatment, when newly-formed cells are daily washed with alkaline soap, perhaps dabbed with a sponge, or killed by a mass of charpie saturated with some alcoholic solution to stimulate them. It is a little remarkable that under such treatment ulcers heal at all. In short, I was early persuaded that the menstruum best adapted to the multiplication and transformation of cells was the fluid in which they are normally found, — that a pus or lymph dressing was the best; and my efforts were directed towards keeping this pus from decomposition. I now again attempted this.

A compress wet, as before, in a carbolic solution of one in sixty was applied to an ulcer, and covered with rubber to prevent evaporation. Beneath it a tube was inserted for the injection, twice a day, of the same carbolic solution. This dressing could be left without renewal for a week.

But the trouble of frequent injection was not its only imperfection. The surface of a cloth is too rough and absorbent to be placed in contact with growing cells. These multiply faster after the cloth has been floated off the surface by a thin layer of pus. To obviate this difficulty, gold-beater skin was interposed in contact with the ulcer. Its soft surface was all that could be desired; but, unluckily, two days sufficed to dissolve it. Carbolized bladder was next tried, and did well, but proved a little stiff and dry. Curiously enough, the growing cells ("wandering") penetrated its moist surface, so that when it was raised they were torn off bleeding. I now adopted the smooth, but impenetrable surface of oiled silk. This answered admirably, and I had at last reached the expedient long before employed by Lister.

Under such a dressing an ulcer not only exudes the thin layer of fluid in which the cells thrive, but its surface and margin become as uniformly smooth and glassy as the oiled silk which molds them. Such a surface contrasts strongly with the inflamed and corrugated exterior of an ulcer dressed, for example, with charpie and tincture of myrrh. The cell transformation is now the very horticulture of repair. The pink cicatricial edge rapidly contracts around the wound. Besides this, if you desiccate the surface by blowing upon it, you discover a concentric glistening film of cuticle, previously invisible, which may attain, in a large ulcer, the extraordinary width of a quarter to three quarters of an inch in a week, — preparing the way for the cicatrix which follows. Such is the result when the surface has been flattened and polished by the glazed and impervious surface of oiled silk, while the atmospheric germs have been effectually excluded from it. This last being a fundamental condition of success, we will now consider it as practiced and prescribed by Lister. A diagram will make this plain.



LISTER DRESSING.

1. Represents a wound containing a drainage tube.

2. Is a protective of oiled silk in contact with the wound, overlapping its edge, and traversed by the drainage tube.

3. A layer of folded and carbolized muslin, which largely overlaps the protective.

4. A final layer of folded carbolized muslin, containing a single rubber cloth. The latter has the distinct duty of diverting the discharge and delaying its direct progress to the surface. It thus retards decomposition, which occurs in the fluid soon after it has soaked its way to the air, and is then rapidly communicated to the wound.

5. Represents the path of the discharged fluid, when diverted by the rubber cloth.

The same dressing is to be wrapped about the extremity of a stump, or carefully fitted to the curved surfaces of the chest and shoulder, — for example, after excision of a breast, — and the whole is then bandaged.

A dry spot of discharge appearing on the surface of the bandage may perhaps be overlooked. But if the discharge soaks through it, and the stain grows larger, the whole dressing must be renewed at once. This happens the day after the operation; then perhaps several times in a week; later, more rarely. It is desirable that the carbolized covering should exert an antiseptic influence for many days, or, as sometimes in a knee excision, for several weeks, without renewal. This is the object of the muslin, a coarse and cheap fabric impregnated with carbolic acid, which is mixed with rosin to hold and slowly deliver it, and with paraffine to make the rosin flexible.[1]

Briefly to recapitulate: the wound is covered with oiled silk, and with fifteen or twenty layers of carbolized muslin containing a rubber cloth, and then bandaged. Every precaution is taken to prevent the contact of germs,

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[1] The following is the method of making the carbolized muslin: —

Crystallized carbolic acid	one part.
Common resin	five parts.
Solid paraffine	seven parts.

Melt the two latter in a water bath, and add the acid while stirring.

The muslin employed in our hospital is of cotton, and known as Colerain or strainer cloth.

The hot mixture is sprinkled upon the muslin with a large brush. To further diffuse the carbolized mixture, the muslin is then folded small, and subjected to pressure in a tin can, for several hours, at the temperature of boiling water.

whether during an operation or a dressing; the wound, the skin, the cloths, the surgeon's hands, the instruments and sponges, being all repeatedly washed in a carbolic solution.

LISTER'S ATOMIZER.

The atomizer, which blows a cloud of spray, of the strength of one in forty, upon a wound, whether during an operation or a dressing, is an essential feature of Lister's method. It certainly adds nothing to the immediate comfort of the surgeon. But it seems to be an available substitute for a part of the washing and slopping incident to the use of antiseptics in a fluid form. and is in that respect a great convenience. This is especially true of a dressing in bed. Its efficiency could hardly have been anticipated, but there is no reason to doubt it. Lister seems to have first tried a jet of fluid.

The result of a complete Lister dressing, spray included, is sometimes marvelous, — as, for example, in a resection of the knee, which may require to be dressed two or three times during the first ten days, and only as often during the next two or three months.

This method might be advantageously practiced for the first time under a sunbeam where the enemy is visible. Other methods will in time doubtless supersede it, but there is no reason to suppose that its principles can be neglected without largely impairing the average result. The fighting manual of exclusion may change from year to year, but an uncompromising hostility to germs will continue to be an abiding article of surgical faith.

DRAINAGE.

We are now to consider another point of great importance. Fluid contents accumulate in a closed wound. If you remove a fatty tumor from the back, you will find it difficult to get a permanent union by first intention. A sanious fluid collects beneath the uniting integuments, and the wound becomes an abscess. This often happens after excision of the breast, of tumors under the angle of the jaw, and beneath the flaps of amputation. Ligatures and stitches encourage such abscesses, and are often responsible for them.

It is therefore a cardinal point in the treatment of every closed wound to evacuate this sanious fluid by inserting in the wound, before dressing it, a "tent" over which the flaps may heal. Such a tent is a small rubber tube perforated with holes, and inserted in a dependent part of the incision, deep enough to insure its drainage. It passes through the oiled-silk protective, and is then cut off and secured by a string, so that it may deliver the fluids outside the silk into the muslin. Every considerable sinus afterwards occurring about a wound must be thus drained. During the healing of a wound nothing is so insidious as the burrowing of pus, which may occur even when it is not wholly imprisoned. It travels by its own weight. I have formerly and repeatedly impressed on you the necessity of free incisions for its evacuation at the nearest surface which it is safe to cut. In these days such incisions should be tubed, and their interior injected and carbolized. If you cannot cover them with antiseptic dressing, let them be carefully and thoroughly injected with a carbolic solution of one in sixty, or one in forty, twice a day, and placed under a carbolic drip.

The drainage tube is withdrawn gradually and slowly, in view of the fact that any premature closing of the interior surely results in abscess.

Horse-hair and other materials have been suggested as substitutes for the rubber tube, but not, as I think, with advantage.

LIGATURES.

A common silk ligature, cut short and left upon an artery, after some months decomposes and disappears. But catgut, even when carbolized, and whether employed as ligature or stitch, deliquesces in a few days, and so repays the trouble of its use. Once applied, it needs no thought, and in fact generates in its immediate neighborhood a wholesome carbolic atmosphere.

ANTISEPTIC SUBSTITUTES.

If you have no atomizer, drench the wound or compound fracture inside and out with a solution of one in forty; or wipe it out and pour in carbolized oil,[1] as originally recommended by Lister in the treatment of compound fracture, and then get the wet and wide-spread dressing quickly into place, with oiled silk next the wound, — or, if you have none, wet and carbolized cotton batting, or folded cotton cloth, or both. A limb thus dressed, or even without dressing, may be placed under a drip, as in the two cases of open knee-joint in our wards, where a wick-yarn siphon leads the antiseptic fluids to a cloth lightly laid on the gaping wound, while another below the limb conducts it from a rubber sheet to the floor. On the body a drip is less available than on a limb. You may remember that a pile of burnt flour is an old and good dressing for certain ulcers. Carbolized sawdust or bran has been advantageously substituted for flour upon a carbolized wound.

Guerin's cotton-wool dressing effectively filters the air, especially if the inner layers be wet and carbolized. But the outer and dry layers should be several inches in thickness, and largely overlap the wound or wrap the limb. The surgeon undoubtedly obtains excellent results by this method, — the carbolic element, which adds greatly to its efficiency, having been adopted from Lister.

CARBOLIC POISONING.

When a large surface has been dressed with a carbolic lotion for a considerable time, the system may suffer from its absorption. The most striking toxic indication is a dark bluish-green color in the urine; there is also prostration. It is then necessary to discontinue the carbolized fluid. Salicylic acid may be substituted.[2]

I have purposely deferred until the conclusion of this lecture two matters of importance. The first is the relation of repair to the pulse and temperature; the second, its relation to coagulum. The first of these points has great practical interest.

[1] One part carbolic acid in six to fifteen parts of linseed oil.

[2] Water dissolves, of salicylic acid, only about one part in three hundred; but the addition of eight parts of borax to boiling water enables it to dissolve ten parts in one hundred. Alcohol dissolves salicylic acid, and the solution may be then mixed with water to impregnate cotton-wool. The addition of a little glycerine keeps the pungent dust from the atmosphere, if the cotton be used after drying.

I. INDICATION OF ABSCESS IN THE WOUND.

In the old method of dressing wounds, hæmorrhage and suppuration announce themselves at the surface. But you will ask, as I did, How can we ascertain whether a mass of antiseptic covering may not imprison or conceal an abscess fatal to union, and possibly disastrous to the patient? Fortunately, an abscess in the wound unfailingly and at once reveals itself by an elevation of pulse and temperature. An abrupt protrusion upon the zigzag lines of the carefully kept chart peremptorily directs attention to the wound and a renewal of the dressing.

Such an abscess must be at once freely evacuated, carbolized, and tubed, whether it be again protected by a close dressing or by a lighter antiseptic covering.

II. COAGULUM.

When dealing with a wound which is to be covered by integument, the surgeon cannot exercise too much patience in tying all the vessels. Fluids may, notwithstanding all his care, collect in the cavity. The mere washing of a freshly cut surface with a carbolic solution of one in forty excites the capillaries so that effectual drainage becomes essential. In a closed wound we aim by the careful drainage of blood and serum to secure a permanent contact of the surfaces. But in an open wound a coagulum may be turned to good account. Its exact behavior is less important. Physiologists incline to the opinion that it does not itself become transformed, but that new tissue penetrates into its interstices. It may thus become an admirable dressing, provided only we prevent its death and deliquescence. This is quite possible by thorough antiseptic protection.

CASE OF ŒSOPHAGOTOMY.[1]

BY A. B. ATHERTON, M. D., FREDRICKTON, N. B.

Previous history: Mrs. F., aged seventy, multipara, has had asthma for ten or fifteen years, and suffers nearly all the time from a cough, with considerable expectoration. Otherwise her health is good. The patient was always thin.

At noon, August 28, 1877, while eating some lamb, she swallowed a piece of bone, which stuck in her throat and caused a good deal of choking. While I was being sent for, she succeeded, by external manipulations with thumb and fingers, in working the foreign body down as far as the lower part of the neck. I was soon in attendance, and by means of œsophageal forceps and horse-hair snare endeavored to withdraw the foreign body, but without success. I also made some slight attempts to push it down into the stomach, but it could not be moved from its position. Much distress and pain were caused both by presence of the bone and by my efforts to dislodge it.

August 29th. The suffering was so great that scarcely any sleep had been obtained. The cough was very troublesome, and she felt something sticking in the throat when she tried to expectorate. She swallowed with pain and difficulty. Pulse 100, feeble. Œsophagotomy was advised and consented to.

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[1] Communicated to the Journal, at the author's request, by D. W. Cheever, M. D.

Operation. — Chloroform was given for a few minutes, till she was partially anæsthetized, and then ether was substituted. An incision three or four inches long was made on the left side of the neck at the inner side of the sterno-mastoid, but not quite so obliquely as that muscle runs. The anterior jugular vein lay so much in the way that it was divided, and bleeding from it was controlled by torsion. After getting through the superficial fascia and platysma muscle, there came into view the anterior belly of the omo-hyoid, which with the sterno-mastoid and carotid vessels was drawn to outer side. By use of director and handle of knife the posterior part of the trachea was reached. Now a sponge probang was passed through the mouth into the œsophagus, till it brought up against the obstruction. The sponge could be felt somewhat indistinctly at the bottom of the wound, and, after considerable searching, just below it and at the lower end of the incision was discovered a hard body with a rather sharp outline. A slight touch of the knife brought into view the upper end of a piece of bone, which was seized by forceps and extracted. It proved to be a portion of lamb's rib, having obliquely cut ends and measuring rather more than one and one half inches from tip to tip. It lay nearly straight up and down in the œsophagus, but its rough, jagged ends prevented its being readily dislodged.

I omitted to mention that upon coming down upon the deep tissues I found them swollen, and the parts about the œsophagus infiltrated with what appeared to be sero-purulent matter. Also some bubbles of gas escaped before I cut into the œsophagus. The wound was sopped with carbolic acid and water, one to eight. Also three stitches were put in the upper part of the incision. The rest was left open. Carbolized oil dressing.

Eight P. M. Patient has had a good deal of distress from thin mucus in air passages, giving rise to almost constant cough and expectoration; also considerable pain in neck, and soreness in chest and between scapulæ. Latter relieved somewhat by poultices. Pulse 112. Oat-meal gruel (strained) given by enema; one half pint in quantity. August 30th. Enema was not retained. Slept but little. Otherwise as yesterday evening. About four ounces of gruel given this morning. Twelve A. M. Enema not retained long. Repeated at visit. Nine P. M. Enema came away in half an hour. One of beef tea given this evening, two or three drachms of brandy being added. August 31st. Slept rather more than on previous night. Retained enema. A good deal of pain and soreness of neck, increased by cough. Pulse 96. Enema of last evening repeated. Nothing but a little water allowed by mouth since operation. September 1st. Last two enemata given yesterday were returned almost immediately. Very restless all night. Pulse 96. Very feeble. Patient looks haggard, and moves in bed with difficulty. Wound appears sloughy since yesterday, and smells foully. Enema given at visit, but was soon returned. Four P. M. A tube passed into stomach and one half pint of brandy and milk injected. Nine P. M. Seems rather better, and moves with greater ease. Pulse 88. Enema of beef tea and brandy tried again. No opiate added, through fear of ill effects upon expectoration. For same reason none has been given by mouth since operation. September 2d. Retained enema, but slept little. Cough very troublesome, and expectoration thicker and more purulent. Looks about as yesterday morning. Pulse 92. Weak. Tube introduced into stomach and more than one half pint of milk with a tablespoonful of brandy injected. Two P. M. Beef tea and brandy injected into stomach. Seven P. M. Looking brighter. Cough still pretty severe. One pint of milk and an ounce of brandy administered by tube. September 3d. Slept pretty well. Cough not so bad. Swallows some nourishment, and thinks that when head is turned to right side very little runs out of wound. Asks to stop, therefore, taking food by tube. Pulse 92. Sutures removed from wound, which still looks sloughy. Two P. M. One pint of milk and an ounce of brandy again introduced into stomach. September 4th. Doing fairly. Cough still troublesome. Took some broth in night, and an egg-nog this morning. Slough pretty well off wound, but skin on its edges is red and irritable looking. This is probably in part due to escape of liquids that are swallowed. Pulse 88. Bowels regular. September 6th. No food injected into stomach yesterday. Does not seem quite so well. Wound looks more sloughy. A large piece of dead tissue removed from deeper part of wound. September 7th. Gave two meals by tube yesterday. Seems rather stronger to-day. No food, except brandy and water, to be swallowed till none comes out through wound. This assented to reluctantly by patient, who dislikes very much the introduction of tube. Discharge is copious this morning, and some more sloughy tissue removed. September 8th. Wound less open and not so inflamed. A smaller tube used to-day, No. 8 catheter. No. 12 causes some bleeding. Has had two meals a day of milk and brandy for last few days. Seems a little nauseated by a pint; to have less than that amount, and it is to be given three times in the day instead of twice. September 10th. Cough continues troublesome. Mustard poultices relieve it somewhat. Simple enemata used to procure motion of bowels when required. September 15th. Wound healing. Cough so troublesome that Dr. Coburn gave an enema of chloral to produce sleep. September 22d. For last few days Dr. Coburn gave a bromide of potash and tinct. lupulin mixture, with good effect on cough. Wound nearly healed. No fluid passes out of wound on swallowing. May therefore omit use of tube, and take soft solids and liquids *ad libitum*. September 29th. Swallows well. October 2d. Wound entirely healed. Able to go out-of-doors.

Remarks. — At the time of writing, February 13, 1879, the patient swallows without difficulty, and with the exception of her old asthmatic cough is quite well.

I would state also that I am much indebted to Dr. Coburn, who in my absence conducted the patient safely through her sickness after September 10th. In another case I should not allow nourishment to be taken so soon by the mouth, for I cannot help thinking that the wound was made unhealthy by its contact as it escaped externally.

RECENT PROGRESS IN DERMATOLOGY.

BY JAMES C. WHITE, M. D.

Classification of Skin Diseases. — The system of classification and nomenclature adopted by the American Dermatological Association at its last annual meeting, and published without comment in the JOURNAL for December 12, 1878, is presented to the profession by the committee[1] not as a perfect scheme, but as the result of long-continued study and effort on their part to simplify systems now in use. As it was modeled upon that of Hebra, a brief notice of some of the modifications adopted will be of importance, as there can be no doubt that it will commend itself in time to the medical profession of our own country at least. In the first place, Hebra's twelve classes are reduced to nine by dropping the first two, hyperæmiæ and anæmiæ, as artificial and unnecessary, and by placing his two groups of benign and malignant new growths under one class. The classification as thus amended is as follows: I. Disorders of the glands. II. Inflammations. III. Hæmorrhages. IV. Hypertrophies. V. Atrophies. VI. New growths. VII. Ulcers. VIII. Neuroses. IX. Parasitic affections. The first class is the same as the third of Hebra's, excepting the introduction of that fugitive affection of the sweat glands, miliaria crystallina. The second class comprises the first, second, and fourth of Hebra, and substitutes for his term, exudations, the more comprehensive title, inflammations. His separation of the erythemata, for instance, into hyperæmic and exudative forms is forced and unnecessary; no such distinction can be drawn between the two processes excepting in degree. This class, inflammations, is of course a large one, and comprises a great part of the most common diseases of the skin, over twenty distinct affections. No attempt has been made to group them, as Hebra has done, because his arrangement is incongruous, useless, and not even correct, as such attempts must be. The affections are arranged mainly in the order of the pathological processes they represent and according to their natural relations as far as possible. Some changes have been made in membership of the class. As many of the affections it contains may pathologically be called dermatitis, the meaning of this term, as employed to represent a distinct disease, has been specifically defined to indicate acute conditions not included under other titles of this class (the forms traumatica, venenata, and calorica being recognized); for some forms of artificial eczema are nothing but a dermatitis venenata, for instance. Pellagra has been excluded as of doubtful existence as a distinct disease; roseola, also, for the same reason. Phlegmona diffusa has been introduced, and glanders omitted. Lichen planus and ruber are recognized, but the ordinary simple forms, so called, are included under eczema, and lichen scrofulosorum is excluded. Hebra's three forms of acne, disseminata, sycosis, and rosacea, are included, so far as they exist, under the simple term acne. Non-parasitic sycosis is merely acne in the beard, and rosacea has been transferred to Class IV., hypertrophies of connective tissue. Seven stages or clinical varieties of eczema are recognized by subtitle. Under the fourth class, the same anatomical groups are retained, but several changes in nomenclature are made. Under the pigment group, lentigo is recognized, but all other forms of melanoderma are included under the single term chloasma. In the hypertrophies of the papillary and epidermal layers keratosis pilaris and senilis (lichen pilaris and senile epidermal accumulations) are introduced, and so is the title xerosis, to indicate the xeroderma (dry skin) of the English writers, and to avoid the confusion which has arisen from the use of this word with another meaning by German authors. Morphœa has been placed here, under hypertrophies of connective tissue, at least until we understand its nature better. Here, too, the title rosacea has been placed, to signify the excessive growth of the integument of the face, both in its erythematous and hypertrophic stages. In Class V., atrophies, the disease called by Hebra and Kaposi xeroderma has been stricken out. The name is wholly an improper one for it, and, moreover was in use for a well-known and simple affection, which is to be called xerosis, as just stated. For the former grave and complex disease the title angioma pigmentosum et atrophicum is proposed to express its pathological relations, and it has been transferred to its proper place among the new growths in Class VI. Among the latter class, which includes the eighth and ninth of Hebra, neuroma has been introduced, and the term fibroma substituted for molluscum fibrosum. The word angioma has also been substituted for the various terms employed to denote new growths of vessels. Under new growths of granulation tissue have been placed with lupus the "malignant" new growths of Hebra, but to these have been added scrofuloderma and syphiloderma. The various forms of cancer have all been included under the one term carcinoma. Class VII., ulcers, was admitted into the system by clinical compulsion, it may be said, but under scientific protest. The eighth class, neuroses, is small, but it includes all the affections which properly belong there. The only change in the last, the ninth class, is the introduction of the generic term tinea, to be applied to all the vegetable parasitic affections in place of the old names, as follows: tinea favosa, tinea trichophytina, and tinea versicolor.

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[1] Transactions of the American Dermatological Association. D. Appleton & Co. 1879.

As will readily be seen, the changes above indicated have been made for the purposes of removing confusion where identical names have been applied to different diseases, of abbreviating where divisions and titles have been unnecessarily multiplied, of substituting appropriate names and positions for those incorrectly registered, and of introducing affections which properly belong to dermatology. As published in list form the scheme thus presented occupies fifty lines less than that of Hebra. No attempt of course was made to base the classification upon any uniform or consistent plan; that is an impossibility. It is therefore partly anatomical, pathological, clinical, and ætiological. But short as it necessarily is of perfection, it seems to us worthy of general adoption by teachers, writers, and students of dermatology.

Contagiousness of Molluscum Sebaceum. — Data upon this disputed point have been collected from recent periodical literature by Dr. Campbell, and presented[1] in the following order. Dr. Barnes reports five cases occurring in one family. The disease manifested itself first upon the hands and face of a girl aged seven, then upon the baby eight months old, then upon the mother's breast, then under the father's eye, and lastly upon another child. Dr. Lieving gives nine cases occurring in a school at the same time. It appeared in November upon one child, and after several weeks successively upon the others, affecting chiefly the face and neck. Smith, in a report upon the cases observed in a Dublin hospital, cites instances to prove the contagiousness of the affection. Finally, Vidal gives two cases of successful inoculation, in one of which the characteristic tumor appeared in three months, and in the other six months after inoculation.

Molluscum Sebaceum. — Bollinger described, in 1873, a contagious affection in fowls, in which the pock-like efflorescence contained bodies resembling the peculiar corpuscles of molluscum. Recent investigation of the same disease in hens and doves has convinced[2] him that it is analogous to molluscum sebaceum in man, and that the peculiar corpuscles in both affections are really gregarinæ, one of the lowest forms of animal parasites, consisting of cells or sacs with a nucleus, which reproduce themselves by self-division. The affection with birds is a fatal and highly contagious one, and Bollinger believes that the parasite is identical with that of molluscum sebaceum of man, although attempts to transfer the disease from one host to the other have hitherto been unsuccessful.

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[1] Archives of Dermatology, April, 1879.

[2] Viertelj. für Derm. und Syph., vi. Jahrg. 1 Heft, from Versaml. deutsch. Naturforscher, 1878.

Excretion of Iodine. — Adamkiewicz states[1] that he has demonstrated the presence of iodine in the pus taken from the eruption produced by the administration of iodide of potassium by the starch and nitric acid test. The quantity was of course exceedingly minute. He infers from this that iodide of potassium is excreted by the sebaceous glands, and, being decomposed in them by the products of cell disintegration, the free iodine causes the inflammation of the gland. Inasmuch as the iodine efflorescence spares those portions of the general surface which are provided with sweat glands alone, the palms and soles, he concludes that it is not these but the sebaceous glands which are the cause and seat of the eruption.

Excretion of Bromine. — Guttmann[2] has also demonstrated the presence of bromine in the pus of the acne pustules of a patient who had been taking bromide of potassium for a long time.

Exfoliative Dermatitis of Nursing Children. — Ritter von Rittershain describes,[3] under this title, an affection which has been observed in two hundred and ninety-seven cases, during the past ten years, in the infant asylum at Prag, with a mortality of fifty per cent. The prodromal stage, consisting of a dryness of the skin, is followed by an erythema, beginning generally upon the lower half of the face, and spreading with more or less turgescence over the whole surface. At the same time fissures are formed about the mouth, and the mucous membrane within is covered with an exudation. The child remains generally without fever, and nurses well. In a few days the epidermis becomes separated by the effusion beneath it of fluid exudation, and is cast off in large and small masses, leaving red excoriations which soon dry, or crusts. The cuticle upon the hands and feet comes off in glove-form. Occasionally the eruption resembles a fine vesicular eczema, or pemphigus-like bullæ are observed. The brownish-red excoriated patches assume rapidly a brighter color, and are followed by a fine desquamation. The whole process generally lasts but a week or ten days. Occasionally it is followed by prolonged furunculosis and phlegmonous and gangrenous inflammation. Post-mortem examination fails to reveal the cause of the cutaneous manifestations.

Histology of Dysidrosis. — Dr. Tilbury Fox and Dr. Crocker, of London, publish[4] in a separate form their latest contribution to the literature of this much-mentioned affection. As stated in former reports, we differ from Dr. Fox in regarding it as essentially a disease of the sweat glands, and consider it to be a dermatitis, the vesicles of which do not differ materially from those in palmar eczema, especially those which occur in cases of artificial origin. In their article the authors adhere to their original opinion, and give seven figures illustrative of the minute anatomy of the disease. From this study they conclude that it is an "affection of the sweat apparatus, in which the ducts in the Malpighian layer probably become choked, but certainly distended, which is followed by the escape of fluid from them into the tissue around, giving rise to the formation of characteristic vesiculations, which are at first imbedded in the skin, but afterwards, in consequence of the increase of the effusion, enlarge so as to cause uplifting of the cuticle and the formation of loculated bullæ." The question to be determined is the nature of the fluid of the vesicles. If Dr. Fox can demonstrate that it is perspiration and not serous, such as is found in all other forms of dermatitis, his sections and deductions from them would be unnecessary; until he does this we must decline to regard them as settling the question, especially as they conflict with the results of similar anatomical investigations made by other observers. (See notice of Dr. Robinson's paper in JOURNAL of December 13, 1877.)

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[1] Medicinisch-chirurgische Rundschau, January, 1879.

[2] Medicinische-chirurgische Rundschau, February, 1879.

[3] Centralbl. für med. Wissensch., from Central-Zeit. für Kinderheilk., 1878, No. 1.

[4] Transactions of the Pathological Society of London, 1878.

Treatment of Psoriasis by Immersion. — Dr. Balmanno Squire reports[1] a case of extensive psoriasis treated for six weeks by immersion for several hours a day in a warm bath. At the end of this time the disease had greatly abated, and the cure was finished by chrysophanic acid ointment. The action of prolonged bathing upon psoriasis has been fully tested in the baths of Leuk and by Hebra's continual bath.

Acne in Flax Mills. — Dr. Purdon, of Belfast, Ireland, reports[2] the occurrence of a peculiar form of acne upon the fore-arms of operatives in the linen mills of that district, the great centre of this industry. It affects principally the young girls who remove the bobbins from the machines and oil the same, and the spinners. The skin of the arms is harsh, dry, and covered with a papulo-pustular efflorescence, having a "shotty" feel in its early stage, and is accompanied by numerous comedones. The eruption is frequently observed upon the face, and is accounted for by wiping the face while it is perspiring with oily hands. The disease is attributed to the oil used for the machinery, and to the oil, also, contained in the flax. A certain description of Russian flax is supposed to produce a pustular eruption closely resembling that in variola. A chemist of Belfast is stated to have obtained from flax fibre a volatile oil. Treatment in the affection seems to be of little service as long as the patient remains in the mill.

(*To be concluded.*)

PROCEEDINGS OF THE BOSTON SOCIETY FOR MEDICAL OBSERVATION.

A. M. SUMNER, M. D., SECRETARY.

OCTOBER 7, 1878. *Involution of Uterus.* — DR. E. H. STEVENS, of Cambridge, read the regular paper, on A Case of Involution of the Uterus, which was published in the JOURNAL for February 20, 1879. — DR. H. I. BOWDITCH asked if it was not customary to keep patients in bed for a longer time than stated by the reader. He also inquired what was the cause of the pain spoken of after the first attempt at reduction. DR. STEVENS replied that the patient was so hard to manage that she could not be kept in bed longer than the time mentioned. The pain spoken of was caused by the deep wire sutures which had been passed through the cervix. — DR. C. P. PUTNAM inquired if it had been recognized at the time of the first attempts at reduction that the uterus had not been replaced entire, and if a distinct ring could be felt. He had seen cases where such a ring could be felt. Dr. Putnam stated that it was his opinion that if a uterus were once entirely replaced it did not have a tendency to come down again.

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[1] The Clinical Society's Transactions, vol. xi.

[2] Archives of Dermatology, January, 1879.

Croton Chloral in Neuralgia. — Dr. H. I. **Bowditch** reported a case of facial neuralgia which had been relieved in a decided manner and without any unpleasant effect by three five-grain doses of croton chloral, after all other drugs had failed to give relief. — Dr. **Williams** stated that he had often used it with advantage instead of opium, after operations about the eye. The chloral had no unpleasant effect, and he thought it safer. — Dr. J. O. **Green** remarked that he had used this drug at the City Hospital in cases of neuralgia of the head, and had obtained a wonderful effect in one case.

Dysmenorrhœa and Tape-Worm. — Dr. **Bixby** reported a case of a young woman with dysmenorrhœa. Upon her second visit he found that she had a tape-worm. Upon appropriate treatment twenty-five feet of the worm, with the head, was dislodged. Since then the patient has had no dysmenorrhœa. — Dr. H. I. **Bowditch** said that formerly in all cases of dysmenorrhœa a strong cathartic was administered, and asked if, in view of the above case, it would not be good practice to do so now.

October 21, 1878. *Croton Chloral.* — Dr. **Bowditch** wished to state that in the case of neuralgia reported at the last meeting the pain had partially returned, and had to be relieved by narcotics and doses of croton chloral, and he did not find that the relief was as permanent as he thought at the last meeting.

Pleuritic Effusion. — Dr. **Bowditch** said that he had a case of simple non-purulent effusion into the chest. He had drawn off the fluid six or seven times in the previous five weeks to prevent compression of the lung, and three or four months before, after tapping, he heard a rubbing sound throughout the chest to the point of puncture, and thought that it would not fill again; but after a rest of four months he found the chest refilled. He wished to ask whether he was justified in making a permanent opening in this case of serous effusion, and run the risk of its becoming purulent. He wanted to know if there was any objection to this mode of procedure under the circumstances. There was another reason why this should be done, namely, that within the past month enlargement of the heart had taken place, and he had seen two cases of this character where the patients died suddenly from heart disease. — Dr. **Bradford** thought that the dangers Dr. Bowditch spoke of were very much less if the operation were done by the antiseptic method. He had seen many cases of empyema in Lister's wards, and some in the New York hospitals, and the danger to life was comparatively slight.

Malformation of Ureters. — Dr. W. H. **Baker** read a paper on Malformations of the Ureters, where the left ureter opened in the neighborhood of the urethra, and by operating he connected the ureter with the bladder, with perfect recovery of the patient. The paper was reserved for publication.

Hydrophobia. — Dr. T. B. **Curtis** read a paper on a case of hydrophobia, with a fatal result, where the patient took thirteen and three quarters grains of Merck's curare in twenty-three hours. The patient continued to the end to display considerable muscular strength in his paroxysmal struggles. — **Dr. J. J. Putnam** said that he had been much interested in Dr. Curtis's paper, especially as he had previously had the opportunity of talking with him about it. There seemed to be no question that, as Dr. Curtis had said, the paroxysms were due to inhibition of the inspiratory centre, and he believed that this was due, not to any peculiar susceptibility of the inspiratory centre to inhibitory influences, but to the greatness of the inhibitory stimulus. The reason for this belief is that, as we know from the experiments of Wundt, the power of a nervous centre (or nerve fibre) to respond to an excitation by showing phenomena of inhibition, is one which implies, in proportion to the degree to which it is present, that the nervous tissue is in an efficient and healthy state, and that this is the first physiological property to be lost in case of disease from any cause. With reference to the nature of the powerful inhibitory influence which must be the immediate cause of the paroxysms, Dr. Putnam thought it was to be traced not to a hyperæsthetic condition of the peripheral nervous system, in favor of the existence of which there is no evidence, but to the peculiar mental condition of the patient; the paroxysms being thus to be regarded as parallel to the state of a person said to be "paralyzed with fear," etc., or that of a drowning man, struggling convulsively, and "catching at straws" for help which is in fact only removed the farther from him by his endeavors.

NOVEMBER 4, 1878. *A Complicated Case.* — The regular reader of the evening, **Dr. Driver**, read a paper entitled A Complicated Case: —

The patient, a female, having heart disease since girlhood, developed lung difficulty; then suddenly cerebral symptoms showed themselves, which were suspended to allow an attack of typhoid fever to run its course; after which the cerebral symptoms again manifested themselves, and the patient died. At the autopsy, made by Dr. Cutler, there were found a small aneurism the size of a bean in the right anterior cerebral artery filled with a dense laminated clot, and in the right middle cerebral a still smaller aneurism filled with clots, completely shutting off the blood supply to the right corpus striatum. This corpus striatum had softened and become necrosed, and in the latter process a peripheral vessel had been opened, which allowed of cerebral hæmorrhage, from which the patient died. There was disease of the mitral valve of long standing, with vegetations and stenosis. Broncho-pneumonia of both lungs, with tuberculosis of one, was found. The spleen was enlarged, with embolic infarctions of old date. In the intestines there were found typhoid ulcerations, with enlarged mesenteric glands. The liver was also enlarged.

Dr. Morrill asked why, in view of the sudden nature of the attack and the existence of heart disease, embolism was not as probable a cause of the brain trouble as tubercular meningitis. — **Dr. Driver** replied that the heart disease was of long standing. — **Dr. Morrill** said that embolism was not usually the result of recent cardiac trouble.

Ruptured Pericardium and Diaphragm. — **Dr. Draper** showed a specimen of ruptured pericardium and diaphragm, and gave the following account of the case: —

B. McD., thirty-eight years old, a vigorous Irish laborer, was standing upon a low platform at the edge of a sewer excavation, when a cart was carelessly backed against the stage, throwing it and its occupant into the cut, a fall of twenty feet. The injured man was rescued after some delay, and died in twenty minutes from the time of the fall, having continued in an insensible condition from the outset. At the autopsy, nineteen hours *post mortem*, the only external signs of violence were some superficial abrasions of the forehead and face, with two small bruises at either side of the sternum, close under the clavicles. After removal of the sternum and costal cartilages a distention of the pericardium was noticed; incision of this part exposed a great quantity of clotted and fluid blood filling the cavity. Four fluid ounces of bloody serum were removed, leaving coagula in masses entangled in the old adhesions of the heart and pericardium. In the parietal portion of the pericardium, beginning just behind the apex of the heart and passing downward and to the right a distance of four inches, was a laceration involving the pericardium and the upper muscular layers of the subjacent diaphragm. The interventricular septum was also ruptured transversely. The liver showed four small superficial lacerations on the inferior surface of its right lobe. The right kidney presented five superficial tears, half an inch long, near the hilus on the anterior surface. This organ lay in a mass of fat which was much bruised and infiltrated with extravasated blood. The sternum was fractured through the centre of its body. The fifth and sixth ribs on the left side were broken just outside the nipple line. The left tibia and fibula were fractured transversely at their middle.

GREEN'S PATHOLOGY.[1]

THE present edition appears two years after its predecessor, which has undergone a considerable degree of revision in the way of addition and subtraction. The same peculiarities which were referred to when the previous edition was noticed are still present, and the reader must continue to hope that the literary style of the author may be combined with a more thorough and critical display of his subject.

One of the first changes to be noticed is a different grouping of the several varieties of tumors. This, on the whole, is a change for the better, though it is difficult to understand the reason for placing the myxomata at the end of the list of tumors composed of simple forms of tissue. The consideration of mucous tissue naturally precedes that of other forms of connective tissues, except the fibrous, with which it is so closely related.

Special attention may be called to the introduction of a short chapter on scrofulous inflammation, and to the alterations in the chapters on tuberculosis and phthisis. Greater prominence, though perhaps too great, is attached to the presence of giant cells as a characteristic of tubercles.

The rearrangement of the section on pyæmia and septicæmia is to the manifest advantage of the reader, and tends to harmonize the theories of these subjects with the more recent views.

In the consideration of lesions from syphilis the omission must be deemed important where any criticism of Heubner's statement of the characteristic value of endarteritis is lacking. Furthermore, although Klein's paper on the changes occurring in scarlet fever is interesting, and not without value, still it is by no means of sufficient importance to call for the insertion of a section on scarlatinal nephritis. The changes in the kidney in scarlet fever essentially represent a diffuse nephritis, and the latter may result from other causes than the one mentioned.

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[1] *An Introduction to Pathology and Morbid Anatomy.* By T. HENRY GREEN, M. D. Lond. Third American from the fourth revised and enlarged English edition. Illustrated. Philadelphia: Henry C. Lea. 1878. Pp. 331.

The chapter on thrombosis is still behind the times, especially in that part relating to the organization of the thrombus. There is no mention of the results of Baumgarten's work, which has done so much to throw light upon the nature of the changes taking place around and in the clot.

A considerable number of drawings, all excellent, have been added to this edition. Figure 73, however, better illustrates the alveolar changes in desquamative pneumonia than it indicates the early appearance of a miliary tubercle. If the tubercle has any characteristic, it is that of circumscribed growth within interstitial tissue. To give this up is to depart from the generally accepted view which elsewhere appears prominent in the book.

It may be stated now as before that "the physician who likes to know something of what has been done will undoubtedly be interested in this volume." It is better than its predecessor as more evenly representing prevailing views, and it helps to pave the way for a comprehensive, exact, and impartial work on pathology and pathological anatomy, which does not yet exist in the English language. R. H. F.

DUHRING'S ATLAS OF SKIN DISEASES.[1]

This part of Dr. Duhring's Atlas presents the portraits of four interesting cases of disease, — scabies, herpes zoster, tinea sycosis, and eczema vesiculosum. The first of these affections has become so rare of late years, in this part of the country at least, since immigration has almost ceased, that it is well-nigh impossible to make a clinical demonstration of its features to a class of students. A plate like the illustration here given, in which the author and artist have almost perfectly succeeded in imitating its characteristic minute lesions, becomes, therefore, an important aid in teaching and to the practitioner who has not had opportunity of acquainting himself with their appearances either in foreign hospitals or in past times at home. To picture the burrow of the itch insect successfully is almost an impossibility. The illustration of tinea sycosis, the advanced stage of ringworm of the beard, is remarkably good, the best representation of the disease ever published, we think. A study of it, in connection with the plate of sycosis non-parasitica in Part II., should make the diagnosis between these affections and eczema of the bearded face, so often confounded by the practitioner under the name barber's itch, an easier matter. The variety of eczema here illustrated (vesiculosum) is well chosen, because it is one of the rarest forms met with in practice. Vesicles in eczema, in spite of Willan's classification and the author's statement that they are "the typical expression" of the disease, are under our clinical observation the exception instead of the rule. The opinions of the latter, however, upon this point, as well as those expressed in the text concerning the other affections here represented, are of course more fully stated in his text-book, and are not now the subject of critical remark. As explanatory of the illustrations and descriptive of the cases selected, the text is wholly satisfactory.

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[1] *Atlas of Skin Diseases.* By Louis A. Duhring, M. D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania, Dermatologist to the Philadelphia Hospital, etc. Part V. Philadelphia: J. B. Lippincott & Co. 1879.

FOX ON SKIN DISEASES.[1]

In preparing this edition for publication in the United States the authors state that they have increased the matter to about three times its original amount, and have rewritten it almost wholly. Its purpose, they say, is to afford assistance to the student in his early study of skin diseases, and to serve as a manual for ready reference to the practitioner in his daily practice. If such books are necessary, if these purposes are not better supplied by the more complete works on general dermatology, such, for instance, as the excellent handbook of the senior author, then this one is a success. It presents a very complete outline of modern dermatology, tinged, of course, by the writers' well-known views regarding classification and pathology, but on the whole fairly and broadly executed. It is such a book of its class as only one competent to write a full treatise upon the subject could have written.

The first part is general in character, treating of methods of observation, pathology, classification, ætiology, diagnosis, and therapeutics. In the second part individual diseases are described alphabetically, and methods of treatment quite fully given, reference being made to the abundant formulæ appended to the volume. Dr. Fox holds and here expresses opinions upon many points in dermatology, which actively invite discussion, but stated as they necessarily are, mostly without argument, they may well be left without discussion, especially as they have been amply criticised in connection with former publications. The American editor has inserted some interesting remarks upon peculiarities of skin diseases in the United States, and also the plan of classification and nomenclature adopted by the American Dermatological Association at its last annual meeting.

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WOOD'S THERAPEUTICS.[2]

The former editions of this work having already received from us extended notices, we merely call attention to the additional matter to be found in this last edition. Professor Wood informs us (page 71) that large doses (ten to twenty grains) of quinine have been proved to produce stimulating effects on the uterus during a protracted labor caused by irregular and feeble muscular contractions, but he attributes this effect to "its arousing the general nervous forces of the system." The articles on jaborandi and its alkaloid pilocarpin, salicylic acid, salicine, dialyzed iron, and thymol contain a very fair epitome of recent investigations. We regret that Professor Wood has not inserted in the text the proper doses expressed in metrical weights and measures, as well as those of the commonly used apothecaries' table. We believe none of the therapeutical text-books in English have as yet introduced this practice, while doubtless the use of the metric system would be greatly facilitated by such an innovation. This work bids fair to keep its position as the best text-book on the action of drugs.

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[1] *Epitome of Skin Diseases.* With Formulæ for Students and Practitioners. By Tilbury Fox, M. D., etc., and T. C. Fox, M. B., etc. Second American edition, enlarged and revised by the authors. Philadelphia: Henry C. Lea. 1879.

[2] *Treatise on Therapeutics, Materia Medica, and Toxicology.* By Prof. H. C. Wood, Jr., M. D. Third edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co. 1879.

THE ADMISSION OF WOMEN TO HARVARD UNIVERSITY.

We called attention two weeks ago to the fact that the board of overseers had under discussion the question of accepting a bequest of ten thousand dollars, offered in case women were admitted to the medical department. Since that time the final meeting has been held, but previous to this it was thought expedient to call the medical faculty together for a formal expression of opinion. At this meeting of the faculty it was evident that there was a decided change of opinion since its previous vote, taken one year before. The debate terminated with the following resolution, carried by a vote of thirteen to five: "Whereas the medical faculty are now engaged in radically changing the plan of study in the school, an undertaking which will require several years for its completion, and will demand all the time and ability of the teachers which are available for the purpose, we deem it detrimental to the interests of the school to enter upon the experiment of admitting female students." It was also "Resolved that it is not advisable to open the course of study at the medical school to women" by a vote of fourteen to four. One member who was obliged to leave during the discussion would have voted with the majority in each case. Under these circumstances it was but natural that the overseers at their meeting, held a few days subsequently, resolved "That the overseers find themselves unable to advise the president and Fellows to accept the generous proposal of Miss Hovey" by a vote of seventeen to seven. In view of this it is somewhat surprising that the president, who, it will be remembered, was one of those who signed the majority report of the committee favoring the admission of women, quietly introduced the following proposition at the end of the meeting, after a long discussion on the main question and without previous notice: "That in the opinion of the board of overseers it is expedient that under suitable restrictions women be instructed in medicine by Harvard University in its medical school." This question was put without previous debate, and passed by a vote of sixteen to ten, several members, not having, we are informed, appreciated its inconsistency or its attitude of opposition to the very clearly expressed views of the faculty. If the second resolution is to be considered a fair expression of opinion of the board of overseers, which we do not think to be the case, Harvard is so far on record as favoring the coeducation of the sexes.

The main argument upon which the little band of persistent and energetic ladies relied who favor the education of women at the university, and under whose influence its present head seems to have become an advocate of the cause, was the total lack of means to obtain a proper medical education in this country. This was their strong point, and so far as the majority report shows we find no evidence that such opportunities exist. A glance, however, at the catalogues of medical schools for women in this country, and some of the opinions of prominent men in the principal cities upon the advantages of such schools, gives quite a different picture from that presented to the overseers.

The Tenth Annual Catalogue of the Women's Medical College of the New York Infirmary for 1878–79 shows a prosperous condition of that school. A graduated course of three years' study is provided, to which preliminary examinations or diplomas are required for admission. Yearly and final examinations for a degree are held by the faculty, after which candidates are required to go before a board of examiners, consisting of some of the most eminent professors of the medical schools of New York. The best clinical facilities are within reach. The medical class for 1877–78 contained forty-seven students. Among the names on the list are those of six students from Massachusetts. At the commencement, May 22, 1879, ten graduates were examined and pronounced well qualified by the board of examiners. Members of the board regard the standard of excellence at the examinations as good as that at the best colleges.

The Twenty-Ninth Annual Announcement of the Women's Medical College of Pennsylvania for 1878–79 gives a favorable account of the condition of that institution. This school is established on a permanent basis, having an endowment fund. It has a progressive course of three years' study, and careful examinations for a degree. It has excellent clinical advantages, particularly at the Women's Hospital, where over four thousand patients are treated annually, and instruction is given daily by the resident physician, Dr. Anna E. Broomall. The class for 1879 has ninety students. Twenty graduates received their degrees this year, and the quality of the students is represented as better every year.

The Ninth Annual Announcement of the Woman's Hospital Medical College, of Chicago, represents the faculty of that school as "desirous to give every possible encouragement to the growing tendency toward a higher medical education." It requires a preliminary examination or diploma for admission, a course of three years' study, and a final examination for a degree. It has a "new college building admirably adapted to its wants." It has extensive clinical advantages and abundant material for the study of practical anatomy in the dissecting-room. The medical class for 1877–78 consisted of thirty-two students. The number of graduates of the class of 1878 is seven.

Incidental replies to letters of inquiry from leading physicians in New York and Philadelphia develop the fact that while the schools for women there are looked upon with great favor, the universal opinion of the profession, so far as it has been expressed, is decidedly and strongly against the coeducation of the sexes in medicine.

From this testimony it is evident that abundant opportunity for a good medical education of women does exist in this country.

We are informed that in a recent number of the *Coelnische Zeitung* it is stated that the university at Zurich has decided no longer to admit women, because the experiment had proved a failure, and had led to evil moral results. Syracuse University has, we understand, also had a somewhat similar experience.

It can hardly be possible that such evidence as this has been wholly overlooked. How are we to interpret, then, the unwillingness of the female sympathizers to found a separate school, which, with one half the energy now displayed, and the moneyed interest to back it, could easily have been accomplished? Clearly this movement is intended as the thin end of the wedge which is to open the entire university to women. The vigorous rally of the faculty at the eleventh hour was not sufficient to counteract the influences which in plausible disguise were quietly exerting their full strength. Had this body from the outset given in a decided manner the weight of its opinion against the question, and presented an impenetrable front, no weak point of attack would have presented itself. But some of its members chose at first, for reasons best known to themselves, to assume an ambiguous attitude. Into this crevice the wedge was dexterously inserted, and the woman party, well satisfied with their success, will drive it home at the first favorable opportunity.

We trust there will be a vigorous protest from the alumni at their annual meeting against this "new departure," and that they will make their influence felt in the coming election of overseers.

MEDICAL NOTES.

— The Warren Triennial Prize of four hundred dollars will be awarded next year to the best work on Original Observations in Physiology, Surgery, or Pathological Anatomy. Essays should be forwarded to the resident physician of the Massachusetts General Hospital on or before February 1, 1880. The large sum offered for competition by this prize fund brought out an unusual number of valuable essays in 1877.

— Dr. Adolph Gubler, professor of therapeutics in the medical school of Paris, died on April 18th, in the fifty-eighth year of his age. He was born in Metz, April 4, 1821. He was the president of the International Medical Congress held in Paris last year, and was one of the editors of the new *Revue d'Hygiene.*

— Dr. A. Reeves Jackson, late of the Woman's Hospital of the State of Illinois, announces the opening of a new private hospital for the treatment of diseases of women.

NEW YORK.

— On the 28th of May the schooner Mary A. Whitlaw arrived in New York harbor from Miragoane with yellow fever on board. She sailed on the 6th, and during the voyage lost three seamen from the disease, one dying on the 10th, another on the 12th, and a third on the 20th. The brig Eva M. Johnson, which sailed from the same port on the 29th of April, and arrived on the 29th of May, also lost her master from yellow fever during the voyage.

— Kleptomania is not ordinarily set down in the books as one of the effects produced by the taking of opium, but a Chinaman who has just been committed in the Tombs police court for trial on a charge of stealing an umbrella from a store on Broadway assigned the cause of the theft to the fact that he was under the influence of that drug at the time.

WASHINGTON.

— The bill for the prevention of epidemic diseases has finally passed both ouses of Congress, with certain modifications. A substitute for senate bill

108 was reported by the committee to the senate, which underwent considerable discussion on May 22d and 23d. The bill was in substance the same as that for which it was offered as a substitute, being modified mainly in the third section, — other sections being so worded as to correspond with the same, — which third section in the first bill provided for the making of necessary rules and regulations by the National Board of Health under the authority of the government of the United States, and for their enforcement by that authority; the substitute recognizing and aiding the enforcement of such rules and regulations of state boards as tend to prevent the introduction of contagion from foreign countries and from one State into another; but further, that where there are none such, or where they are insufficient, the board shall report such facts to the president, and he shall in his judgment require the board to make such proper rules and regulations, to be enforced by the state authorities, or, in case of their failure or refusal so to enforce them, the president is to provide for their proper enforcement. The sections having reference to diseases of cattle have been stricken from the bill, and in consequence the appropriation asked for is reduced to $500,000. The discussion on the bill led to the further modification that the penalties named should not be inflicted until the provisions of the bill had been officially promulgated for at least ten days in the port from which the vessel sailed, and the expression in the first section of "vessels engaged in the transportation of goods or persons" was altered to read simply "any merchant ship or vessel." Some discussion arose as to what constituted contagious and infectious diseases, and the honorable senators were not quite clear as to the distinction between typhus and typhoid fevers; an attempt was made to define and limit the application of the expression contagious and infectious diseases, but failed. The next important item considered was the question of expenditures, which resulted in the passage of an amendment making all such to be disbursed under the direction of the secretary of the treasury, and further that the act should not continue in force for a longer period than four years. In the house the amended senate bill was passed without further amendment. Mr. Young, as the chairman of the committee introducing it, asked that in consideration of its importance and the necessity for avoiding further delay it be passed as "a measure of compromise, not commanding the entire approval of every member of the committee in all its features," thinking it better to "wait until the regular session to make such changes and alterations as experience may show to be necessary." After considerable discussion and the passage of the bill, Mr. Young moved to reconsider the vote by which the bill was passed, and also moved that the motion to reconsider be laid on the table, which was agreed to.

— Senate bill 206, relating to the transportation of animals, has called forth a very interesting debate in the senate, with valuable information and data concerning the great defects in live-stock transportation and the consequent injurious quality of the meat, to say nothing of the cruelties practiced unnecessarily. Without coming to any definite conclusion, however, on May 27th the further consideration of the bill was postponed until the first Monday in December next.

BOSTON CITY HOSPITAL.

SURGICAL CASES OF DR. WILLIAM INGALLS.

[REPORTED BY S. B. WOODWARD, M. D.]

CASE I. *Crushed Foot; Syme's Amputation; Repeated Hæmorrhages; Ligature of Anterior Tibial; Amputation below Knee; Recovery.* — July 7, 1878, M. L., laborer, aged thirty-two, had his right foot severely crushed by the cars, while intoxicated. He was at once brought to the hospital, where the injured foot was removed by Dr. Ingalls near the ankle-joint (Syme's operation). Lister method followed in all its details, and stump dressed with Lister gauze. Hæmorrhage profuse. Numerous vessels tied with carbolized catgut. Continuous oozing for the next two days, the dressings being changed twice daily in consequence. On the fourth day delirium tremens was developed, and the patient tore off the Lister gauze. Delirium proved to be of a mild type, however, and lasted but two days. The stump was now dressed with a carbolized compress, and for a week everything went on well, the edges of the flaps uniting by first intention, all sutures being removed on the seventh day. On the 18th of July, eleven days after the injury, a brisk arterial hæmorrhage took place, the blood coming from just under the edge of the upper flap. This was controlled by a pad over the lower part of the anterior tibial artery. Hæmorrhage recurred the next day while the stump was being dressed, though the pad was still in position, and again with still greater violence, and from two places, on the evening of July 20th.

At this time Dr. Ingalls decided to tie the offending vessel, in the wound, and ether was given for that purpose, but suppuration had so extensively destroyed the coats of the arteries that this was found to be impossible. By a prolongation of the original incision, the anterior tibial was then with great difficulty reached and secured in the middle third. Extensive suppuration took place in the line of the incision, large sloughs formed, and capillary hæmorrhages were continually occurring. A slight touch or jar, or even a sudden movement of the body, was often a sufficient cause for the latter, and during the next two weeks a solution of ammonio-ferric alum was several times used with good effect.

At midnight of the 29th a severe arterial hæmorrhage took place. Patient pulseless, yawning, and pallid. Ligature in place and firm; bleeding point above it. Several slight attacks occurred during the next two days, and August 1st there were two severe hæmorrhages, controlled only by long-continued pressure by femoral tourniquet. Two hours after the last of these Dr. Bolles (then on duty) amputated the leg in the upper third. The Esmarch bandage and rubber tourniquet were used, and but little blood lost. Extraordinary vascularity of the parts, over twenty vessels, most of them large, being tied with silk. Toward the close of the operation the patient had a hæmorrhage from the lungs. There was sudden and severe collapse; his pulse reached 150, and his mouth filled several times with bright clotted blood. Ether was withdrawn, and the pulse rapidly failing, while respiration became more and more shallow, brandy and carbonate of ammonia were given subcutaneously. When the patient had partially rallied under this treatment, a subcutaneous injection of ergotin was given, sutures were loosely run through the skin flaps which had been made; the stump was left open, and laid on a pillow. The patient was immediately removed to bed, heaters and blankets applied, and stimulating and nutritive enemata of brandy, laudanum, and milk given every two hours during the night. As he slowly rallied from the severe shock several bleeding points appeared and were secured.

The original intention of drawing together the edges of the flaps on the succeeding day was abandoned on account of continuous oozing, and the sutures were from day to day cut out, and the stump left to granulate. To combat the hæmorrhagic tendency the granulating surface was syringed twice daily with a mild solution of the "ferric alum," and two drachms of fluid extract of ergot were given morning and night.

A severe hæmorrhage took place on the 7th during the act of defæcation, and for several weeks slighter ones were continually occurring from very trivial causes, the blood at these times coming from no distinct vessels, but pouring from nearly the whole surface of the stump.

The wound granulated slowly, the large surface gradually cicatrized, and although recovery was somewhat retarded by a slight exfoliation from the end of the tibia the patient was discharged, November 1st, in good condition and with his stump practically healed.

There was no history of antecedent hæmorrhagic tendency in this case. During the four months patient had about twenty hæmorrhages. For weeks he lay with scarcely power to raise his head from the bed, with no appetite, and almost afraid to sleep. He was so reduced that at the worst his blood was an almost colorless serum without the power of coagulation. A femoral tourniquet was kept constantly applied, and a watcher by his bed day and night. The rubber cord of Esmarch was at first used, but the old-fashioned strap, pad, and screw were substituted, the patient learning to tighten them himself, which he often did before his watcher observed anything wrong. Lister dressings were dispensed with at the secondary amputation, because with the almost absolute certainty of subsequent hæmorrhage it was thought neither desirable nor safe to have the stump covered up from sight.

CASE II. *Compound Fracture of Leg; Resection of Fragments; Hæmorrhage; Ligature of Anterior Tibial; Burrowing of Pus; Amputation at Knee; Death.* — August 16, 1878, J. M., a German, aged twenty-two, of gross habit and a confirmed beer drinker, was kicked in the leg by a horse while driving him. He then either jumped or fell to the ground, bearing his whole weight on the injured limb. When brought to the hospital a wound admitting the little finger and extending to the bone existed on the outer side of the middle third of the right leg. Both the tibia and fibula were fractured transversely in this locality, with marked anterior riding of the upper fragment of the tibia, which pressed dangerously on the skin immediately below the compound opening. There was great swelling of the whole leg, which was emphysematous nearly to the knee. There was little hæmorrhage. Shock marked. All efforts to "reduce the fracture," both with and without ether, having altered the position of the fragments but slightly, if at all, the air was pressed out of the leg, the wound sealed with compound tincture of benzoin, and the limb having been placed in a fracture box the patient was removed to the ward. Marked constitutional symptoms appeared, and during the next three days the swelling and emphysema increased, both in amount and extent, while the compound opening became larger from the sloughing due to pressure of jagged fragments of bone on the skin. The wound was washed out with disinfectants, but it soon became evident that there was not sufficient drainage, and on the 19th, suppuration being by this time established, it was decided to make counter-openings.

Ether having been given, Dr. Bolles, assisted by Dr. Fifield, made a more thorough examination of the limb than had been previously possible, the original wound being enlarged for this purpose. The muscles were dissected up in every direction; the leg was distended by emphysema, and filled with pus and decomposed blood, and it was evident that vigorous measures could alone save the limb. On examination of the fracture it was seen that the upper end of the tibia was held in its unnatural position by the fractured portion of the fibula, which was pressed against it in the form of an arch, and which supported it so firmly that it could not be broken down. The end of the upper fragment of the tibia was denuded of its periosteum, and apparently dead. The ends of the broken fragments of the tibia were removed with the chain saw, and as it was still impossible to straighten the limb the fractured portion of the fibula was also resected. Four counter-openings were made on the anterior, external, and internal surfaces of the limb, horsehair drainage tubes inserted, and the leg placed in a Bolles fracture box. Stimulants were freely given, and the leg was washed out thoroughly twice daily with carbolic solution, one part to eighty. Pus continued to form in large amount, and the horsehair not proving satisfactory as an aid to drainage, rubber tubes were substituted on the 23d. On the 26th, during the morning dressing, there was a sudden and severe arterial hæmorrhage from deep down near the site of the fracture. After ineffectual attempts to check it by milder means a femoral tourniquet was applied, ether given, and the anterior tibial artery tied above and below. A pocket of pus over the outer malleolus was also opened, and an additional counter-opening made five inches higher up the leg. Very severe shock followed, lasting several days. During the next week the patient lost ground rapidly; the bones became more and more denuded of their periosteum, the tissues sloughed extensively near the seat of fracture, ulcerations appeared on the under surface of the limb, and in spite of the numerous openings pus burrowed further and further up the leg. Dr. Gay — then on duty — decided that amputation had become imperatively necessary, and September 6th the limb was removed at the knee-joint, with antiseptic precautions. Anterior and posterior flaps: the former of skin, three inches long; the latter of skin and muscle, four inches. Anterior flap made entirely of the wall of a suppurating cavity. Two drainage tubes (rubber) inserted between the flaps, one running well up into the cavity of the abscess. Flaps brought together without tension and united by sutures.

In the amputated leg was a large sinus extending from ankle-joint to patella with branches running in all directions. The bones were denuded of periosteum for several inches above and below the seat of fracture. There was a large abscess over the inner condyle of the femur, not communicating with the joint.

Leg redressed under spray on the succeeding day, on account of abundant purulent discharge, and twice daily for the next two days for the same reason. Lister dressing omitted on the 11th, the anterior flap having sloughed, as well as part of the posterior, while everything was soaked with an excessively abundant and offensive discharge. The stump was now kept wet with a solution of chlorinated soda, the lower flap supported by plaster, and the leg laid on a bed of oakum. Syringing with carbolic solution twice a day was again ordered. Inflammation now attacked the cartilages over the condyles, sloughing and suppuration continued, and the patient had several chills. Involuntary dejections appeared on the 15th, and, becoming rapidly weaker, the patient died of exhaustion on the morning of the 20th, five weeks after the receipt of the injury.

LETTER FROM ST. LOUIS.

Abscess of the Liver; Aspiration. — Prostitution.

Mr. Editor: — Our City Hospital is giving us quite an opportunity for studying the treatment of cavities containing pus by aspiration. Since February 26, 1876, there have been in that institution nine cases of abscess of the liver, in which aspiration has been practiced, besides several cases of psoas and lumbar abscess and empyema. At present there is in the hospital a patient from whose pleural cavity twenty-eight ounces of pus were drawn at the second aspiration, and also a case of hepatic abscess, in which, at the second aspiration, eighty ounces of pus were drawn.

In regard to the cases of hepatitis, it may be of some interest to note that during the past two years twenty-one cases have been treated, of which notes are at hand. Twelve of these were not aspirated, and probably included those which were supposed to be the milder cases. One of these was opened by cauterization, and resulted in death. Two, at their own request, were discharged from the hospital: one unimproved, and the other in such a condition that recovery seemed impossible. The remainder of the twelve were all fatal, giving ten deaths out of ten cases where aspiration was not practiced, and where the result is known. There is a thirteenth recorded case discharged recovered; but the notes are not sufficient to confirm the diagnosis. Of the nine in which aspiration was used, two recovered, and one is still in the hospital doing very well. Thus, out of eight cases where aspiration was used and the result is known, two, or twenty-five per cent., recovered. After the abscesses have been evacuated drainage tubes are inserted, and the cavities are frequently washed out with weak solutions of chloral or carbolic acid. Upon one patient the aspirator was used five times, and upon both those who recovered it was used three times. Some of these hospital cases, together with several from private practice, formed the subject of an interesting article by Dr. P. G. Robinson, published in the *St. Louis Courier of Medicine* for January, 1879.

At the Female Hospital, suppurating buboes have also been treated by aspiration, the results being much better than when they were treated by the old methods. The *St. Louis Courier of Medicine* for April contains a paper on this plan of treatment by Dr. P. V. Schenck, physician in charge of the Female Hospital.

Our limestone dust is said by some to be the cause of the remarkable health of St. Louis, — it acting as a disinfectant. If this is true we ought to be secure against all epidemics for the coming year, and able to defy yellow fever, or even the plague; for at present the air is full of clouds of flying dust, scattering catarrh and conjunctivitis in every direction. But we physicians would be willing to have the dust laid, even if it should cost a little more illness among our fellow-citizens.

A bill has just passed the state legislature, and has been signed by the governor, prohibiting the licensing of prostitution in the State of Missouri. Suits have been filed against several keepers of houses of ill-fame, to test whether our present laws are sufficient for their suppression. This whole question of prostitution is a very serious one, — much more so than most of us realize.

SHORT COMMUNICATIONS.

A CASE OF CARBOLIC-ACID POISONING.

BY JAMES E. WALKER, M. D., BOSTON.

JANUARY 12, 1879, at four A. M., I visited Mrs. J., American, aged thirty-three years, who, for the relief of a "distress in the stomach," had about one hour before requested a little brandy, but by mistake had been given one half ounce of liquefied carbolic acid. She immediately "felt mad," "fought the air," and in fifteen minutes became unconscious. Symptoms at four A. M.: unconscious; upper and lower extremities somewhat flexed and rigid; jaws pretty firmly closed; eyes shut and pupils contracted; pulse very feeble, but not frequent; respiration attended with "the rattles," otherwise natural. At this stage of the examination it was discovered that the patient's sad condition was caused by carbolic acid. Gave a hypodermic injection of one sixth of a grain of sulphate of morphia. Outward applications of heat and mustard were made, and brandy was administered per rectum. I requested a consultation, and Dr. C. W. Swan was called. Seven A. M. Very little muscular rigidity; pulse extremely weak, and surface of body cold. One drachm of brandy hypodermically. Brandy and beef tea every hour by the rectum. 10.30 A. M. Is conscious for the first time; vomits; general tremor; "feels cold;" pulse 80, feeble. Takes milk, white of eggs, flour gruel, and brandy. 12.30 P. M. Has severe burning sensation in the stomach; sore throat; painful deglutition; headache; no thirst. Temperature 98° F. Pulse 90, weak. To have lime-water. Seven P. M. At times delirious; pulse 100; temperature 100° F.; nausea, but no vomiting; hurried respiration. Morphia, one sixth of a grain, subcutaneously. 13th, eleven A. M. Rested well. Breathes better. Considerable cough, thirst, and nausea. Burning sensation diminished. Pulse 78; temperature 98.5° F. 14th, ten A. M. Pulse 70. Abdomen tender on pressure. Throat not so sore. 15th. Is very dizzy if she raises her head from the pillow. Mouth and tongue peeling. Ordered iron and quinine. From this date the patient continued to improve, but it was four weeks before she could relish food and get sufficient strength to be about the house.

LARYNGEAL MIRRORS AS AIDS TO THE SPECULUM.

BY WILBUR P. MORGAN, M. D., BALTIMORE, IND.

I HAVE for several years been in the habit of using the laryngeal mirrors as aids to the speculum in the diagnosis and treatment of uterine and vaginal affections. My attention was first attracted to the feasibility of the method in the effort to extract a bit of a sponge tent broken off and left at the internal os, the external os being partly dilated.

The patient was exceedingly nervous, and the womb very irritable. A happy thought was suggested by the sight of my laryngoscope standing near. Nott's speculum was inserted, the light from Tobold thrown into the vagina, the mirror adjusted, and the sponge seen and lifted with a pair of throat forceps from its situation at the internal os before the patient knew the manipulation had begun. Her caustic remark, "Why did n't you do that at first?" could not destroy the pleasure I felt at the acquisition of a method of illumination that I have since used successfully in many cases of diseased uteri. The largest (one inch to two inches) mirrors are the best, and they may be used with any speculum.

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REPORTED MORTALITY FOR THE WEEK ENDING MAY 24, 1879.

Cities.	Population estimated for July, 1879.	Reported Deaths in each.	Annual Death-Rate per 1000 during the Week.	Percentage of total Deaths from				
				The Principal "Zymotic" Diseases.	Pneumonia.	Scarlet Fever.	Diphtheria and Croup.	Diarrhœal Diseases.
New York	1,085,000	444	21.34	17.79	12.39	6.98	3.83	4.05
Philadelphia	—	264	—	9.47	—[1]	1.89	1.89	1.13
Brooklyn	564,400	144	13.30	19.44	10.41	5.55	7.64	1.38
Chicago	—	122	—	18.85	4.10	4.10	7.38	2.46
St. Louis	—	76	—	6.58	11.84	1.32	—	2.63
Baltimore	365,000	109	15.57	16.51	1.83	6.42	5.51	.92
Boston	360,000	110	15.93	12.72	8.18	1.82	2.73	3.64
Cincinnati	—	80	—	17.50	10.00	15.00	—	—
District of Columbia	160,000	57	18.58	15.80	14.04	8.77	—	1.75
Cleveland	—	50	—	28.00	12.00	6.00	6.00	2.00
Pittsburgh	—	44	—	15.91	13.64	—	9.09	—
Buffalo	—	37	—	45.95	5.41	16.22	16.22	—
Milwaukee	—	23	—	13.04	4.35	—	8.70	4.35
Providence	101,000	30	15.49	26.67	3.33	10.00	3.33	3.33
New Haven	60,000	15	13.04	13.33	—	—	—	—
Charleston	57,000	28	25.61	3.57	3.57	—	—	—
Nashville	27,000	7	13.52	28.57	14.28	—	—	14.28
Lowell	53,300	9	8.80	—	22.22	—	—	—
Worcester	52,500	25	24.83	20.00	4.00	—	16.00	4.00
Cambridge	51,400	12	12.17	8.33	—	—	8.33	—
Fall River	48,500	19	20.43	5.26	15.79	—	5.26	—
Lawrence	38,200	10	13.65	—	—	—	—	—
Lynn	34,000	8	12.27	25.00	—	—	25.00	—
Springfield	31,500	8	13.24	37.50	—	—	12.50	—
New Bedford	27,000	15	28.97	13.33	6.67	—	6.67	—
Salem	26,400	10	19.75	20.00	20.00	—	20.00	—
Somerville	23,350	8	17.86	—	—	—	—	—
Chelsea	20,800	11	27.58	9.09	—	—	9.09	—
Taunton	20,200	4	10.32	—	25.00	—	—	—
Holyoke	18,200	7	20.06	42.86	—	28.57	14.29	—
Gloucester	17,100	6	18.29	—	—	—	—	—
Newton	17,100	—	—	—	—	—	—	—
Haverhill	15,300	6	20.45	—	—	—	—	—
Newburyport	13,500	4	15.45	—	25.00	—	—	—
Fitchburg	12,500	4	16.68	25.00	—	—	—	—

[1] Not reported.

Eighteen hundred and six deaths are reported: 291 from the principal "zymotic" diseases, 251 from consumption, 140 from pneumonia, 90 from scarlet fever, 81 from diphtheria and croup, 39 from diarrhœal diseases, 30 from bronchitis, 21 from whooping-cough, 20 from typhoid fever, 12 from erysipelas, 10 from cerebro-spinal meningitis, six from measles, three from remittent fever, two from pleurisy, one each from congestive, intermittent, malarial, and typhus fever, none from small-pox: indicating an increase in cerebro-spinal meningitis, a decrease in the total mortality from measles, pulmonary diseases, erysipelas, whooping-cough, and the "zymotics" as a whole; while diarrhœal diseases, typhoid fever, diphtheria and croup, and scarlet fever remain without essential change. From *bronchitis*, 16 deaths were reported in New York, five in Brooklyn, one in Chicago, Boston, District of Columbia, Pittsburgh, Milwaukee, New Haven, Cambridge, Fall River, and New Bedford. From *whooping-cough*, five in New York, four in Brooklyn, two in Cincinnati, Cleveland, and Springfield, one in Chicago, Baltimore, Boston, Pittsburgh, Providence, and New Haven. From *typhoid fever*, six in Philadelphia, two in Chicago, Boston, Pittsburgh, and Providence, one in New York, Brooklyn, St. Louis, District of Columbia, Buffalo, and New Haven

From *cerebro-spinal meningitis*, five in Philadelphia, two in Chicago and Buffalo, one in New York, Baltimore, Boston, Worcester, and New Bedford. From *erysipelas*, four in New York, two in Cleveland and Pittsburgh, one in Philadelphia, St. Louis, Baltimore and Boston. From *measles*, two in New York, District of Columbia, and Cleveland. From *remittent, intermittent, congestive, and malarial fevers*, two in Brooklyn, one in Baltimore, Chicago, Charleston, and Nashville. From *typhus fever*, one in Cleveland. The Southern cities remain quite free from indications of yellow fever, no authentic cases having been reported. In eighteen of the nineteen cities of Massachusetts, the mortality from diphtheria was much greater than for the previous week; from pneumonia and typhoid fever it was much less.

The weather was reported fair, cool, and changeable (on the lakes), the meteorological record for the week in Boston (latitude 42° 21′, longitude 71° 4′) being as follows: —

Date.	Barometer.	Thermometer.			Relative Humidity.				Direction of Wind.			Velocity of Wind.			State of Weather.[1]			Rainfall.	
	Mean.	Mean.	Maximum.	Minimum.	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	Duration.	Amount in Inches.
May 18	30.076	67	76	61	94	79	79	84	W	SE	SW	2	4	11	O	F	C	—	—
" 19	29.990	62	66	55	94	100	75	90	S	E	E	2	3	1	G	G	R	—	.66
" 20	29.895	65	76	61	94	88	89	90	S	E	S	4	7	10	O	F	F	—	—
" 21	29.779	68	86	56	92	50	45	62	SW	SW	N	12	13	18	O	T	F	—	.07
" 22	30.138	53	60	50	46	66	60	57	N	E	O	12	12	0	C	C	C	—	—
" 23	30.403	47	55	44	52	63	61	59	NE	NE	SW	19	24	4	C	C	C	—	—
" 24	30.134	49	58	42	55	58	45	53	W	E	S	11	12	9	C	F	F	—	—
Week.	30.059	59	86	42				71	SW			1446 miles.						10.3	.73

[1] O., cloudy; C., clear; F., fair; G., fog; H., hazy; R., rain; T., threatening.

For the week ending May 3d, in 149 German cities and towns, with an estimated population of 7,401,076, the death-rate was 27.1, an increase of 0.1 from the previous week, with a slightly greater mortality from scarlet fever, diarrhœal diseases, and measles, while diphtheria has continued decreasing since April; whooping-cough, typhus fever, typhoid fever, and acute diseases of the respiratory organs, too, were less fatal. Three thousand eight hundred and fifty-six deaths were reported: 621 from pulmonary consumption, 484 from acute diseases of the respiratory organs, 204 from diarrhœal diseases, 118 from diphtheria and croup, 60 from scarlet fever, 48 from typhoid fever, 47 from whooping-cough, 37 from measles, 18 from puerperal fever, six from typhus fever, one from small-pox. The death-rates ranged from 16.3 in Hanover to 43.6 in Munich.

For the week ending May 10th, in the 20 English cities having an estimated population of 7,383,999, the death-rate was 22.4, a decrease of 1.0 from the previous week, showing a decline in all the principal reported causes of death, which is especially marked in diphtheria, small-pox, diarrhœal diseases, and pulmonary affections. Three thousand one hundred and sixty-eight deaths were reported: 392 from diseases of the respiratory organs, 122 from whooping-cough, 81 from measles, 79 from scarlet fever, 37 from fever, 29 from diarrhœa, 14 from diphtheria, five from small-pox (in London). The death-rates ranged from 12.9 in Norwich to 29.5 in Newcastle-upon-Tyne; London 22.8, Birmingham, 20.4, Liverpool 22.3, Manchester 24.8. In Edinburgh the death-rate was 18, in Glasgow 24, in Dublin 32.

Small-pox continues to prevail, with diminished fatality, in Calcutta, Bombay, London, St. Petersburg, Paris, Budapesth, Odessa, Barcelona, Geneva, and Warsaw, increased in Vienna and Dublin; in many districts of Poland it is increasing. No new cases of the plague have appeared; the investigations and discussions are still going on with reference to the origin of the epidemic. Quarantines have been reduced, as a rule, to restrictions on rags, articles of clothing, and bedding. Diphtheria continues to prevail in Vienna and the Italian cities; measles in Paris and Brussels; fevers in St. Petersburg and Astrachan; yellow fever in Havana and Port au Prince. Under the better regulations of the German government syphilis has decreased enormously in Alsace and Lorraine, and the reported enormous increase in insanity has been shown to be not such, but simply apparent.

Norfolk District Medical Society. — The following officers for 1879-80 were chosen at the annual meeting, May 13, 1879: President, Dr. Robert Amory, of Brookline. Vice-President, Dr. William C. B. Fifield, of Dorchester. Secretary, Librarian, and Reporter, Dr. Clifton E. Wing, of Jamaica Plain. Treasurer, Dr. Norman Call, of Roxbury. Commissioner of Trials, Dr. T. H. Dearing, of Braintree. Nominating Councilor, Dr. D. D. Gilbert, of Dorchester. Committee of Supervision, Dr. J. B. Moran, of Roxbury, Dr. A. D. Kingsbury, of Needham. Councilors, Drs. W. S. Everett, of Hyde Park, A. R. Holmes, of Canton, A. D. Bacon, of Sharon, S. E. Stone, of Walpole, J. H. Gilbert, of Quincy, George W. Fay, of East Weymouth, D. S. Fogg, of Norwood, Robert T. Edes, of Roxbury, P. O'M. Edson, of Roxbury, J. S. Streeter, of Roxbury, D. D. Gilbert, of Dorchester, C. E. Stedman, of Dorchester, W. P. Bolles, of Dorchester, J. G. Flint, of Roxbury. Censors, Drs. J. W. Chase, of Dedham, O. F. Rogers, of Dorchester, G. K. Sabine, of Brookline, E. T. Williams, of Roxbury, Joel Seaverns, of Roxbury. A new code of by-laws was adopted.

New Hampshire Medical Society. — The eighty-ninth annual meeting of the society will be held in Union Hall Opera House, Concord, on Tuesday and Wednesday, June 17th and 18th, at eleven o'clock, A. M. The following special railroad arrangement has been made: The Concord will sell tickets, to Concord and return, from Manchester, Nashua, Raymond, Epping, Newmarket Junction, Portsmouth, Derry, Hooksett, Suncook, Pittsfield, and Goffstown, at reduced prices. Members on the following lines will purchase tickets of the conductors for fare one way: Northern, Concord, and Claremont, Bristol, Connecticut Valley, and Boston, Concord, and Montreal. President's address at twelve o'clock. Oration by C. C. Odlin, M. D., Exeter. Medical Ethics, G. B. Twitchell, M. D., Keene. Practical Medicine, A. B. Hoyt, M. D., Grafton. Surgery, J. H. Wheeler, M. D., Dover. Physiology, C. W. Toiles, M. D., Claremont. Metric System, C. W. Manchester, M. D., Lebanon. Alcoholic Stimulants in Typhoid Fever, C. F. Kingsbury, M. D., Lyme. Differential Diagnosis, D. S. Adams, M. D., Manchester. Practical Use of Disinfectants, William Child, M. D., Bath. Medical History of Dover, J. R. Ham, M. D., Dover. The society will adjourn for the anniversary dinner at two o'clock, P. M. Programme for Wednesday. The society will meet in the hall at eight o'clock, A. M., and attend to the reports of standing committees, the election of officers, and the reading and discussion of any papers left over on Tuesday. (1.) Report of delegates to Dartmouth Medical College. (2.) Report of delegates to other state societies. (3.) Report of district societies, by the secretaries. Election of officers at nine o'clock. Treasurer's report. Report of cases and volunteer papers, with discussion of the same. The following are the officers of the society: President, A. F. Carr, M. D., Goffstown. Vice-president, T. J. W. Pray, M. D., Dover. Treasurer, L. B. How, M. D., Manchester. Secretary, G. P. Conn, M. D., Concord.

Books and Pamphlets Received. — Perineorraphy, with Special Reference to its Benefits in Slight Lacerations, and a Description of a New Mode of Operating. By Edward W. Jenks, M. D., Professor of Gynæcology in the Chicago Medical College. (Reprint from the American Journal of Obstetrics.)

Neurological Contributions. By William A. Hammond, M. D., assisted by William J. Morton, M. D. New York: G. P. Putnam's Sons. 1879.

Premature Ossification of the Fœtal Cranium as a Cause of Dystocia and of Impairment of Intellect in Children. By John Ellis Blake, M. D. (Reprint from the American Journal of Obstetrics, April, 1879.)

The School Garden. Being a Practical Contribution to the Subject of Education. By Professor Erasmus Schwab, Director of the Military College of Vienna. Translated from the Fourth German Edition by Mrs. Horace Mann. New York: M. L. Holbrook & Co. 1879.

Pott's Disease: Its Pathology and Mechanical Treatment, with Remarks on Rotary Lateral Curvature. By Newton M. Shaffer, M. D. New York: G. P. Putnam's Sons. 1879.

American Health Primers. Hearing and how to Keep It. By Charles H. Burnett, M. D. Edited by W. W. Keen, M. D. Philadelphia: Lindsay and Blakiston. 1879.

Annual Report of the State Board of Health of Minnesota. January, 1879.

Yellow Fever. Its Origin and Relation to other Malarial Fevers. By J. G. Westmoreland, M. D. Atlanta, Georgia.